Notice of Allowability	Application No.	Applicant(s)	Applicant(s) MCCULLOUGH, KEVIN A.	
	10/605,041	MCCULLOUGH KE		
	Examiner	Art Unit	VIIV /A.	
	Jason L Savage	1775	ı	
The MAILING DATE of this communication apperalled All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	or other appropriate commu GHTS. This application is s and MPEP 1308.	this application. If not include	ed	
1. X This communication is responsive to Appeal Brief filed 8-12	<u>2-04</u> .			
2. ⊠ The allowed claim(s) is/are <u>1-20</u> .				
3. \square The drawings filed on <u>9-3-03</u> are accepted by the Examiner	•			
4. Acknowledgment is made of a claim for foreign priority und		r (f).		
a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have	.			
2. Certified copies of the priority documents have	been received. heen received in Application	. Nia		
3. Copies of the certified copies of the priority doc	uments have been received	in this national stage application	f	
international Bureau (PCT Rule 17.2(a)).		in this national stage application	on from the	
* Certified copies not received:				
Applicant has THREE MONTHS FROM THE "MAILING DATE" or noted below. Failure to timely comply will result in ABANDONME THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	f this communication to file a ENT of this application.	a reply complying with the requ	irements	
5. A SUBSTITUTE OATH OR DECLARATION must be submitt INFORMAL PATENT APPLICATION (PTO-152) which gives	ed. Note the attached EXAN reason(s) why the oath or o	MINER'S AMENDMENT or NO leclaration is deficient	TICE OF	
6. CORRECTED DRAWINGS (as "replacement sheets") must	he submitted	denoitie.		
(a) ☐ including changes required by the Notice of Draftspersor	n's Patent Drawing Review (PTO-948) attached		
i) 🗀 nereto or 2) 📋 to Paper No./Mail Date				
(b) including changes required by the attached Examiner's A Paper No./Mail Date			÷	
Identifying indicia such as the application number (see 37 CFR 1.84 each sheet. Replacement sheet(s) should be labeled as such in the	meader according to 37 CFK	1,121(d).		
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FC 	of BIOLOGICAL MATER OR THE DEPOSIT OF BIOLO	RIAL must be submitted. Not OGICAL MATERIAL.	e the	
Attachment(s)				
. ☐ Notice of References Cited (PTO-892)	5. Notice of Infor	mal Patent Application (PTO-1	50)	
. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Sum	mary (PTO-413)	52)	
. Information Disclosure Statements (PTO-1449 or PTO/SB/08)	Paper No./Ma	il Date		
Paper No./Mail Date Examiner's Comment Regarding Requirement for Deposit				
of Biological Material	8. ⊠ Examiner's Sta 9.	atement of Reasons for Allowa	nce	

SUPERVISORY PATENT EXAMINER

Application/Control Number: 10/605,041

Art Unit: 1775

The following is an examiner's statement of reasons for allowance:

The prior art such as Guerriero teaches that powder metallurgy methods of forming cast metal matrix composites containing varying amounts and filler materials are known. Guerriero also teaches that forming metal matrix composites containing two differently sized fillers, such as fillers having a high aspect ratio and fillers having a low aspect ratio will result in a composite that may exhibit many desirable properties. Guerriero further teaches that one of the many properties that may be enhanced by formation of a metal matrix composite as that disclosed is the property of thermal conductivity. However, Guerriero teaches that the method of forming such a metal matrix composite containing two differently sized fillers is by placing the fillers in a casting mold and subsequently infiltrating the mold with molten metal as opposed to forming the composite by the powder metallurgy method as claimed.

While both the processes of casting and injection molding by powder metallurgy methods are known in the art, there is no teaching or suggestion that would motivate one of ordinary skill in the art to employ such a powder metallurgy process wherein the materials are selected from the materials containing two differently sized fillers such as is taught by Guerriero.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L Savage whose telephone number is 571-272-1542. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason Savage 11-1-04

DEBORAH JONES
SUPERVISORY PATENT EXAMINER